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ABSTRACT

The BEST IDEA or Multimodal Career Education Model has been proposed as a viable approach for integrating personal and environmental variables in career development programs. An extension of Lazarus' Multimodal Behavior Therapy, the model contains eight factors that make up the acronym: behavior, emotion, self-talk, thought, interpersonal relationships, developmental level, economic and societal factors, and alpha factors. BEST IDEA systematically guides the student, teacher, and counselor through the career development process. As a guide to assessment and intervention it ensures that specific career behavioral needs of individual students are addressed. It includes "assessment rules" that direct individual career development evaluation in a stepwise comprehensive fashion. The aim of assessment is the student's construction of an individualized plan for career development. The student links appropriate intervention strategies with specific needs and enhancing prevention strategies with identified strengths. Interventions include a variety of individual and group activities that may be classified as psychological education, social skills training, and behavioral counseling. Preventive exercises include values clarification, life coping skills training, and other psychological education efforts. Evaluation of outcomes of the model is an ongoing process. Data for as many factors as possible should be secured for comprehensive evaluation. (YLB)

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# THE BEST IDEA:

# MULTIMODAL CAREER EDUCATION

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## THE "BEST IDEA": MULTIMODAL CAREER EDUCATION

Career education emerged during the 1970's as a major component in the educational reform movement which addressed the needs for greater relevance and accountability in education (Bailey & Stadt, 1973). Similarly, career development programs have stressed systematic, comprehensive learning experiences which link the interests and abilities of the individual student with the demands and trends of the world of work (Herr & Kramer, 1972; Hoyt, Evans & Mangum, 1972). In this manner, education becomes a life-long, individuation process that also meets the needs of the community. The systematic and comprehensive characteristics of career education suggest that a multi-factor approach is needed to satisfy the individual and societal demands. The "BEST IDEA," or Multimodal Career Education Model, is proposed as a viable approach for integrating personal and environmental variables.

Early theorists (e. g., Ginberg et al., 1951; Holland, 1966; Hoppock, 1967; Roe, 1957; Super, 1957) recognized that career development and maturation occur as functions of the entire person interacting with impinging environments included social structures, labor market characteristics, educational requirements, family relationships, and socio-economic levels. Career education, in order to remain relevant and accountable, must simultaneously focus upon the personal and environmental factors. The interaction of the two classes of variables can be described as career development, a process facilitated by career education.

In recent years, counseling and therapy have focused increasingly upon the whole person interacting with various natural environments. The cognitive-learning trend in psychotherapy (Mahoney, 1977) is one example

of an attempt to integrate personal and environmental variables in a treatment perspective. Holistic health and behavioral medicine (e.g., Schwartz and Weiss, 1978) approaches, with their foci upon psychological and sociological influences in illness, represent other examples of this integrative movement in human services delivery and research. One of the most comprehensive assessment/treatment models in the psychotherapy literature is the broad-spectrum "Multimodal Behavior Therapy" of Lazarus (1973, 1976). This model directs behavioral assessment and treatment according to the human functions or modalities that are designated by the acronym "BASIC ID." The seven modalities within the "BASIC ID" include behavior, affect, sensation, imagery, cognition, interpersonal relations, and drugs. The drugs modality was later modified to include a variety of factors which seriously affect functioning--e.g., diet and exercise (Gerler, 1979: Lazarus, 1976). Two basic tenets of Multimodal Behavior Therapy suggested its potential value as a model for career counseling.

The major appeal of the "BASIC ID" for career counseling is its comprehensive focus as an assessment device. The model requires the counselor to examine seven major modalities in determining the vocational strengths and career impediments of the client. The second tenet of the multimodal approach is an injunction to not "muddle" or aimlessly concentrate upon one facet of human functioning. Rather, the counselor should address career concerns in as many modalities as possible, thus, increasing the likelihood of maintenance and generalization of treatment gains (Lazarus, 1976). In view of the comprehensive and systematic qualities of the Multimodal Behavior Therapy Model, it is not surprising

that several modifications of the "BASIC ID" have addressed counseling concerns.

Keat (1978) referred to the "multimodal evolution" in counseling and guidance. According to Keat (1978; p. 12) the "BASIC ID" represents a ". . . new way of conducting effective counseling" by ". . . first identifying problems and then utilizing effective intervention strategies in order to ameliorate the client's condition." Keat's adaptation of the multimodal approach is specifically directed at elementary school guidance and counseling activities. The technical eclecticism embraced by the "multimodal evolution" is concerned with efficient and effective practice at all levels through the use of the "BASIC ID," or a related heuristic device, to guide assessment and intervention (Keat, 1978).

Smith and Southern (1979) adapted the "BASIC ID" to fit the needs of career counseling. Their Multimodal Career Counseling model represented an application of Lazarus' (1976) assessment scheme within a systematic intervention strategy. Multimodal Career Counseling involves the following stages: (1) establishing the relationship; (2) screening the modalities (multimodal assessment); (3) intervening with specific, targeted modalities; (4) assigning homework and "tryout" experiences (self-management training); and (5) following-up effects of counseling. The follow-up is a major stage because post-treatment multimodal assessment may indicate needs for "re-cycling" through preceding stages or novel problem areas. Essentially, Multimodal Career Counseling reflects a use of Lazarus' "BASIC ID" within the career or vocational domain.

Another adaptation of the "BASIC ID" (Gerler, 1977) directly addressed concerns in career education. Gerler's (1977) exciting approach integrated aspects of career counseling, behavior therapy, psychological education,

and career development. The underlying concern of the approach is the design of career education programs by addressing each of the "BASIC ID" modalities.

> These programs should deal with : (a) career-related behaviors such as interviewing for jobs and information seeking, (b) the role of affect in decision making, (c) the painful and pleasurable sensations associated with work, (d) the role of mental imagery in vocational development, including the part imagery plays in one's ability to relax during vocational crises, (e) the importance of cognition in vocational development, including the attitudes, values, and beliefs that affect career decision making, (f) the effect of interpersonal relations on an individual's ability to find and maintain employment, and (g) the effect of alcohol and other drugs on career development (Gerler, 1977, p. 239).

According to this approach, various training and learning experiences--drawn primarily from existing resources--would be incorporated into career education programs in order to address each of the seven modalities. While Gerler's (1977) method is comprehensive, it is not necessarily "systematic" in the sense that individual career development concerns are addressed according to unique priorities.

Multimodal career education should systematically address programmatic concerns of the school (environmental factors) as well as individual career development concerns (personal factors). The "BASIC ID" provides an excellent framework for insuring full coverage of the modalities within existing career education programs. The model must be modified additionally to promote the individualization of career development activities within novel career education delivery systems.

## THE "BEST IDEA" IN CAREER EDUCATION

The "BEST IDEA" acronym refers to an expansion of the multimodal career education model to insure that programs address individual career

development needs. Although the labels of the areas have been modified, the "BEST IDEA" incorporates Lazarus' seven modalities, as well as other factors, within its boundary. The modalities are conceived as primary factors, setting events and referent conditions, and secondary factors, or individual variables. Primary factors must receive initial attention in individualized career development activities because these factors influence the frequencies and strengths of secondary variables. Secondary factors, internal and external individual responses, must be considered when the potential confounding of the setting events and referent conditions has been eliminated. In fact, work with primary factors may be effective enough to reduce or suppress individual career problems expressed at the secondary level of assessment.

The "BEST IDEA" model is presented in Table 1.

Table 1

"BEST IDEA" in Career Education

| Acronym | Factor | Description |
|---|---|---|
| B | Behavior | Observable actions or responses |
| E | Emotion | Covert behaviors or physiological arousal |
| S | Self-talk | Internal speech |
| T | Thought | Images or fantasies |
| I | Interpersonal Relationships | Interactions with one or more persons |
| D | Developmental Level | Age-appropriate & special learning needs |
| E | Economic & Societal Factors | Cultural or socio-economic influences |
| A | Alpha Factors | Significant physiological setting factors such as drugs |

The correspondence between Lazarus' (1976) model and Multimodal Career Education (i.e., "BEST IDEA") are apparent. The "Behavior" and "Interpersonal Relationships" factors are the same in both approaches. The "Emotion" factor represents a combination of "Affect" and "Sensation" from Multimodal Behavior Therapy. "Self-Talk" is a delimitation of Lazarus' "Cognition," while "Thought" stresses the so-called "mental" aspects of the "Imagery" modality. Collectively, "Affect," Self-Talk," and "Thought" constitute a class of covert behaviors. "Behavior" represents the overt responses or operants.

The primary factors within Multimodal Career Education account for the extensive influences of situations upon individual overt and covert behavior. Inclusion of primary factors in the "BEST IDEA" renders the model "complete" with respect to conditioning theory (Skinner, 1953) and somewhat more resistant to the criticisms directed at Multimodal Behavior Therapy (e.g. Wilkins & Thorpe, 1978). "Developmental Level" and "Alpha Factors" are setting events in that such influences as learning disability (developmental level) and alcoholism (alpha factor) establish the limits of secondary factors and affect the contingencies which maintain or suppress overt and covert behaviors. "Interpersonal Relationships" and "Economic & Societal Factors" have no parallels in Multimodal Behavior Therapy. The facilitative and inhibitory effects of these primary factors are extremely important in career education and have received much attention in the recent literature.

The "BEST IDEA" or Multimodal Career Education approach is an extension of Multimodal Behavior Therapy (Lazarus, 1973, 1976) which addresses the programmatic and individual concerns of career development

activities. The approach, by including primary and secondary factors, provides additional clarity for individualized assessment and intervention within career education.

## APPLICATIONS OF THE MODEL

Career education, as expressed in special courses or programs and as infused in traditional academic curricula, tends to include several characteristic components. Bailey (1976, p. 32) identified the ends of career education as (1) understanding and implementing self, (2) understanding and preparing for work, (3) accepting responsibility for career planning, (4) developing skills in decision-making and information processing, (5) relating to individuals and groups, and (6) developing and clarifying attitudes and values toward work. In Texas, Occupational Orientation at the secondary school level deals with the ends of career education in four areas of study: self-appraisal, economic and societal factors, occupational clusters, and educational planning (Occupational Curriculum Laboratory, 1979). Therefore, career education may be conceived as a series of exploration activities in which the individual and the world of work are investigated.

The problem with many career education programs, as they are implemented, is a failure to individualize the exploration activities. Another concern is the adequacy of the assumption that exposure to various kinds of occupational information will develop actual job- and career-related behaviors. Although students may recognize that a certain behavior is required in a given situation, if the behavior is not in the repertoire, it must be learned. Vocational education programs meet the

need for specific occupational preparation. However, career education programs are often hampered by overlooking the need to teach students specific career preparation behaviors. The "BEST IDEA" systematically guides the student, the teacher, and the counselor through the career development process. As a guide to assessment and intervention, it insures that the specific career behavioral needs of individual students are addressed.

Assessment

The strength of the Multimodal Career Education model rests in its scope as an assessment tool. However, the multimodal approach is not simply a framework for organizing case notes (Wachowiak, 1978). Rather, the "BEST IDEA" includes "assessment rules" which direct individual career development evaluation in a stepwise, comprehensive fashion. The rules are included in Table 2.

Table 2

"BEST IDEA" ASSESSMENT RULES

| Step in Hierarchy | Description |
|---|---|
| 1.0 | Determine which primary factors affect student's career development behaviors |
| 1.1 | Identify and define concretely Alpha Factors, if any exist in the individual's case |
| 1.2 | Identify and define concretely Developmental Level of the individual |
| 1.3. | Identify and define concretely Economic and Societal Factors that affect the individual |
| 1.4 | Identify and define concretely Interpersonal Relationships associated with the individual's career development |

| Step in Hierarchy | Description |
|---|---|
| 2.0 | Determine which secondary factors affect student's career development behaviors |
| 2.1 | Identify and define concretely Behaviors related to the career development of the individual |
| 2.2 | Identify and define concretely Self-Talk related to career development Behaviors |
| 2.3 | Identify and define concretely Thoughts related to career development Behaviors and Self-Talk |
| 2.4 | Identify and define concretely Emotions related to career development Behaviors, Self-Talk, and Thoughts |

The assessment rules in Table 2 indicate the plan by which individual assessment is conducted. Assessment resources such as a pre-test in a programmed text, a unit in a teacher's guide, or a multimodal behavioral assessment instrument can be used by the student, the teacher, or the counselor to complete career development evaluation. The key to assessment is the focus upon the individual student. Therefore, student self-evaluation or self-monitoring is the preferred medium. According to this approach, the career education teacher and the counselor become resource persons. By following the assessment rules, the student determines, in a systematic and cost-effective manner, career behavioral excesses and deficits.

Accurate identification of primary factors necessarily involves a variety of school and community information sources. Health education and life sciences materials must be accessible during the assessment of Alpha Factors. School health personnel and academic instructors may contribute to the learning experiences that are required for effective identification of Alpha Factors in career development.

Assessment of Developmental Level will be facilitated by review of school records, test results, and similar data. The student receives greatest assistance from teachers, counselors, and other educational resource persons during this step in assessment. Evidences of learning disabilities, cognitive structures, and age expectations must be skillfully shared with the student. The student can be aided in conducting this stage of evaluation through exposure to staffings or committee work such as that required in the construction of an Individualized Educational Plan (IEP).

Determination of relevant Economic and Societal Factors demands more community involvement than needed in the identification of other factors. Students should learn to recognize their relative statuses through exposure to community leaders and other individuals who know what is valued in given neighborhoods and settings. For example, Reverend Jesse Jackson has significantly influenced the perceptions of black youths as they assess personal, academic, and occupational strengths.

Identification and definition of Interpersonal Relationships as primary factors are complex processes. Nevertheless, the influences of small social systems upon individual career development behaviors are substantial. Simply taking into account the family influences upon career interests and values (covert behaviors or secondary factors) demonstrates the criticality of Interpersonal Relationships assessment. This factor is ranked fourth in the hierarchy of primary factors due to the degree of difficulty that will be encountered in completing accurate evaluations. That is to say that multimodal career education assessment may be conducted more efficiently and cost-effectively by investing

greater time with the preceding primary factors. As more precise and viable social systems assessment technology evolves, the order of the primary factors can be rearranged.

Assessment of secondary factors requires fewer resource persons and greater student direction than the identification of primary factors. With sufficient training, students can learn to make accurate assessments of primary factors by attending to information provided by teachers, counselors, parents, community members, and other helpers. Accurate assessment of secondary factors demands that teachers and resource persons assume catalytic, instead of directive or informative, roles. Individual students are the best observers and raters of overt and covert career development behaviors. Resource persons provide the models and assessment tools by which students conduct personal investigations of secondary factors.

The hierarchal arrangement of secondary factor assessment rules is based upon the assignment of decreasing time or effort as factor complexity increases. This approach maximizes the cost-effectiveness of student-directed multimodal assessment. Therefore, overt Behaviors which are observable and quantifiable receive priority while complex Emotions receive relatively little. This strategy was also selected due to importance of directly "training up" job investigation, acquisition, and maintenance skills (see Azrin, Flores, & Kaplan, 1975; Galassi & Galassi, 1978; Prazak, 1969).

Assessment of Behaviors involves attending to the antecedents and consequences of overt responses. By noting the antecedents of behavior, the student learns the controlling conditions of current career development

actions and responses. The consequences determine the frequencies of occurence of "targeted" career development behaviors, or behaviors interest. Reinforcement increases the frequencies of target behaviors while punishment decreases the frequencies. Reinforcement and punishment can be self-administered or applied by others. These contingencies or consequences may be overt or covert when self-managed. During assessment of Behaviors, the student should be concerned primarily with the relative rates of occurence of key career behaviors such as interviewing skills. Through self-monitoring and recording of the rates, students should be able to note behavioral excesses and deficits which impede career development. Resource persons, including parents and teachers, may assist the student in monitoring important behaviors. Behavioral self-assessment has received much attention in the literature (Bellack & Schwartz, 1976; Stuart, 1977).

Assessment of Emotions requires close attending to the somatic or bodily manifestations of physiological arousal. The effects of excessive or chronic autonomic nervous system arousal can be identified readily. These effects include headaches, bruxism, functional diarrhea, heartburn, insomnia, loss of appetite, tension, aggressiveness, confusion, depression, and other symptoms. Stress or anxiety at the physiological level of anlaysis may contribute also to eating, drinking, and smoking problems or "lifestyle disorders." Less chronic or severe arousal is represented by situational fears or concerns as well as pleasurable sensations. Pleas- and feelings associated with work can be cued by real or imagined situations. These feelings render work behaviors and attitudes pleasant or rewarding through classical conditioning. Negative situational and

general emotions also become associated with career development overt and covert behaviors. The association of negative feelings with work behaviors can contribute to the aversive quality of some jobs. Emotional assessment is a major, complex undertaking; therefore, this step in evaluation should be linked to preceding assessments of secondary factors--at this level, assessments of Behaviors.

Self-talk is simply internalized or covert sentences. When statements are spoken, they are considered to be behaviors. However, statements that occur at the subvocal level constitute the class of responses called "Self-Talk." Assessment of Self-Talk involves monitoring and recording the frequencies of evaluative and normative beliefs (see Azjen and Fishbein, 1973), personal and situational labels, and self-instructions Meichenbaum, 1977). Although covert behavior is not as easily identified as overt behavior, Self-Talk can be reliably observed and charted by the student. Resource persons can assist with "cognitive behavioral probes" which assist in the assessment process. Self-Talk can function as antecedents or consequences of external career behaviors. Therefore, covert speech is evaluated with reference to observable target behaviors. For example, a young woman may be inhibited from seeking information about a career as a physician because she frequently says to herself, "Women can't go to medical school." The teacher assists with probes by asking the student to focus upon what one says before and/or after target behaviors--occupational investigation activities in the example.

Thoughts are ideas, daydreams, imagery, covert rehearsal behaviors, and other actions which primarily involve internal visual sequences. Daydreams and fantasies were identified in early occupational development

theories (Ginzberg et al., 1951; Super, 1963) as significant influences upon career choice and vocational maturity. Thoughts function as "what if" experiences which enlarge or limit career development efforts. The realism of thoughts is a major consideration in assessment. Irrational images are often related to irrational self-talk and inappropriate behaviors (Ellis, 1974). Unrealistic and negative images can be associated immobilizing emotions as well. Thoughts, like Self-Talk, can be self-monitored; however, resource persons (especially counselors) must assume important roles. Students should receive training in order to discriminate Thoughts from other covert behaviors. Cognitive behavioral probes could be enlisted to clarify the temporal and contextual boundaried of fantasies and images.

As individual students apply the secondary factor assessment rules, the relationships among Behaviors, Emotions, Self-Talk, and Thoughts become apparent. Student career development needs, expressed as excesses and deficits in overt and covert behaviors, are concretely defined in light of the general effects of primary factors. The assessment hierarchy facilitates the efficient use of time and personal resources--important concerns since assessment, though assisted by resource persons, is essentially a student activity. Teachers and other educational personnel msut remember that accurate assessment is based upon student acquisition of evaluation skills. Thus, assessment behaviors must be taught at the outset of implementation of the "BEST IDEA." Teaching assessment skills requires demonstrating, rote learning, shaping observation and recording behaviors, and testing to insure concept mastery and evaluation competency. An audiovisual introduction to the "BEST IDEA," incorporating examples and exercises, provides an exciting instructional resource for training students in multimodal assessment.

The aim of assessment in Multimodal Career Education is the student's construction of an individualized plan for career development. The plan identifies specific needs as well as strengths. In conjunction with a resource person, the student links appropriate intervention strategies with specific needs and enhancing prevention strategies with identified strengths. Although Multimodal Career Education focuses upon decreasing excesses, increasing deficits, and ameliorating other problems associated with "BEST IDEA" factors, the model facilitates prevention of career impediments by encouraging "self-growth" or skill-building. To increase the impact and utility of the model, intervention strategies should receive the greatest investment of individual and program resources.

Intervention

Interventions in Multimodal Career Education include a variety of individual and group activities. The activities may be classified generally as psychological education (Skovholt, 1977), social skills training (McFall & Twentyman, 1973; Twentyman & McFall, 1975), and behavioral counseling (Krumboltz & Thoresen, 1969). Although some activities include the entire class, many interventions will be oriented to individuals or small, homogeneous groups of students. Each of the three aforementioned intervention classes may be directed at specific learning needs within given factors. In matching interventions with individual career development needs, the factors are considered in the same order as that cited in the assessment rules (see Table 2). Based upon individual plans, relevant primary factors receive attention and then secondary factors are addressed. Assessment is an on-going process; therefore, the schedule of interventions should take into account shifting student needs and factor hierarchies.

Interventions designed to address primary factors require timely implementation and significant involvement of resource persons. When Alpha Factors are identified as impediments to career development, the teacher should immediately refer the student to professional helpers who may or may not be associated with the school district. Alpha Factors such as alcoholism or substance abuse must be treated by a physician, counselor, psychologist or therapist. However, the teacher and other resource persons within the school can contribute significantly to the identification of Alpha Factors.

Individual needs associated with Developmental Level also must receive immediate attention. However, students with serious developmental problems can participate in the Multimodal Career Education program. They need not be referred exclusively to remedial programs. Special education teachers, school psychologists, and diagnosticians can assist the student and the career education teacher with the modification of interventions in order to accomodate student developmental needs. Therefore, students with learning disabilities or other special needs can participate in the career education program. Their individual career development plans will reflect priorities such as adapting the reading or concept level of individual and group activities so that all students can satisfy needs associated with remaining factors in the "BEST IDEA." The flexible, student-centered orientation of Multimodal Career Education is well-suited for complying with the letter and spirit of P.L. 94-142.

Developmental Level interventions may include modifications of instructional resource materials to deal with cognitive organization and

age-appropriate behavior. For example, the Cognitive Mapping Styles instrument (Nunney & Hill, 1972) can be used during the assessment phase to provide direction for materials adaptation. Some students will require predominantly visual activities, while others will experience good results with activities that stress auditory, aesthetic, or additional "strong" media. Similarly, the grade level for which the career education program is offered will determine both the style and content of many "BEST IDEA" interventions. The model is appropriate for elementary school through college to continuing education applications.

Interventions which are matched with Economic and Societal Factors are less concerned with altering the stimulus properties of other career development activities--such as modifying instructional resource materials--and more concerned with providing psychological education and career information about the world or work. Parental and societal influences upon career choice, effects of various environmental motivators (money, prestige, etc.), interactions of labor market demands and supplies of workers, and related socioeconomic factors can be considered in large presentations, small discussion groups, or individual explorations. Field trips, job site visits, and other career-centered excursions into the community can be very valuable in addressing the Economic and Societal Factors. Student and teacher guides in career education (e.g., Occupational Curruculum Laboratory, 1979) have provided sufficient coverage of many socioeconomic issues in traditional programs. Multimodal Career Education interventions in this modality stress not only occupational information and consumer education, but also guidance group activities which note "strengths in being different" (ethnic and cultural pride),

real and imagined obstacles associated with disadvantaged backgrounds and perceptions of relative deprivation. This component of the "BEST IDEA" focuses upon some of the compensatory education and counseling requirements that arise from the failure to have basic human needs (see Maslow, 1968) satisfied during key developmental periods.

Interventions with Interpersonal Relationships are among the activities most easily managed by the teacher. These interventions concentrate upon structured group experiences (Pfeiffer and Jones, 1978) as well as social skills training (McFall & Twentyman, 1973; Twentyman & McFall, 1975). The goals of activities that involve organized groups of students are increasing collaborative conflict resolution, human relations, communication, and problem-solving behaviors. Many of the activities will address individual needs to overcome self-preoccupation, fear of social situations, lack of assertiveness, and performance deficits (see Lange & Jacobowski, 1976; Sarason, 1975). Social skills training and behavioral counseling activities will focus upon building appropriate interpersonal behaviors for a variety of job settings and situations--e.g., speaking over the telephone, arriving for an interview, and addressing an employer regarding a grievance. Some interventions will be concerned with family and peer relationships that suppress or inhibit career development.

Secondary interventions are very individualized. When sufficient work with primary factors is underway, intervention strategies for modifying specific career development behaviors are indicated. The priority for implementing interventions is, in decreasing order, Behaviors, Self-Talk, Thoughts, and Emotions. Due to the complexities associated with work on Emotions, the expertise of behavioral counselors and therapists may be needed. In Multimodal Career Education, the majority of student

and program resources should be directed at the self-modification of concrete overt and covert behaviors.

Modification of individual career-related problem behaviors is best accomplished through the following process. The career education teacher should present several units of instruction concerning operant conditioning. Depending upon the developmental level of the students, several tests (e.g., Goldfried & Merbaum, 1973; Kanfer & Goldstein, 1975; Sherman, 1974, Watson & Tharp, 1977) provide superb introductions to behavior modification. Audiovisual materials also can be used as resource materials. The teacher should then conceptually integrate the operant conditioning model within social learning theory (Bandura, 1969) and other learning approaches (see Hilgard and Bower, 1976). After completing this general introduction, the teacher can provide case examples involving problem specification, recording, and modification. The teacher and additional resource persons should demonstrate behavior change techniques--including stimulus control, self-reinforcement, and chaining (see Malott, Ritterby & Wolf, 1973)--and model appropriate career development behaviors such as reading classified advertisements, writing letters of application, and exploring career information in the library. Although there may be some overlapping with interventions selected for Interpersonal Relationships needs, most interventions concerned with Behaviors will be based upon building individual career development behaviors. The Interpersonal Relationships factor is concerned with behavior which has identifiable functions in the maintenance of "deviant" social systems, such as the stress-aggression vicious cycle (see Novaco, 1978).

Interventions with Self-Talk can be as rigorous as activities concerned with modifying overt behaviors. Self-Talk interventions, which are cognitive-behavioral in focus, include rational restructuring (Ellis, 1976), Goldfried and Davison, 1976), self-instruction training (Meichenbaum, 1977), problem-solving training (D'Zurilla and Goldfried, 1971), and stress-inoculation training (Meichenbaum, 1973). Each of the aforementioned techniques are concerned with the modification of internal statements--also called "attitudes," "evaluative beliefs," "values," etc.--that suppress or inhibit appropriate, goal-directed career development activities. Modification of internal statements or cognitive behaviors involves engaging in realistic, positive self-talk, rather than debilitating negative self-statements, "put-downs," and irrational "oughts" and "shoulds." Cognitive contingencies can be manipulated in many of the same ways as overt behaviors (Mahoney, 1974); therefore, Self-Talk interventions naturally follow and support Behavior interventions. Cognitive behavioral interventions, especially self-management (Stuart, 1977; Watson & Tharp, 1977) and problem-solving (D'Zurilla and Goldfried, 1971), can be cued by written materials or guides in other media. Individual and small-group formats can be used to offer the earlier mentioned specific techniques. Individualized assessment through the completion of inventories and cognitive behavioral probes is essential to effective interventions with Self-Talk problems.

If the images and daydreams that constitute the Thoughts factor have been specified clearly, then effective interventions are possible. Often, Thoughts which cause career development problems are related to unrealistic self-talk and inappropriate behaviors. Therefore, inter-

ventions that focus upon images, fantasies, or internal visual rehearsals should be components of "treatment packages" (Kazdin and Wilson, 1977). The frequencies of occurence of Thoughts can be modified by self-reinforcement or punishment. Visuomotor Behavioral Rehearsal (Suinn, 1975) and Thought Stopping (see Mahoney, 1974) can be used to reprogram these covert behaviors. Interventions with this factor are primarily behavioral counseling endeavors; therefore, relevant resource persons should be consulted.

Interventions with Emotions usually will not be student- or teacher-managed. Skilled mental health practitioners should conduct the treatment procedures required to ameliorate emotional behaviors and physiological symptoms. Systematic desensitization (Wolpe, 1973) and Anxiety Management Training (Suinn, 1977) represent two potentially useful behavioral techniques. Relaxation training procedures (See Lazarus, 1971) can be learned by teachers and students. Thus, relaxation as prophylaxis can be conducted in the classroom. Similarly, guided imagery (Crabbs, 1979 Kelly, 1974), a technique concerned with Thoughts, may be undertaken as a preventive measure.

Prevention

While interventions are selected to meet current individual career development needs, preventive strategies can be offered to groups of students without significant attention to assessment. Many career education programs offer a variety of occupational information and personal skill-building exercises. Preventive exercises include values clarification (Simon, Howe, & Kirschenbaum, 1972), life coping skills training

(Adkins, 1974), and other psychological education efforts (see Alschuler, Ivey, & Hatcher, 1977). Prevention is an important feature of Multimodal Career Education because of opportunities for enlarging or "regionalizing" programs. Also, preventive strategies tend to exercise the factors which receive relatively little attention in the intervention stage.

The likelihood of Alpha Factors, such as the effects of chronic physiological arousal, can be reduced through a series of planned preventive activities. For example, physical and health education staff members can provide information and exercises designed to promote healthful living. Cooperative programs with special education, the Vice Principal's office, and Student Support Services can contribute to the facilitation of development. In this manner, many Developmental Level problems can be avoided. Interfaces with social service and social welfare programs can contribute to reductions in Economic and Societal factor difficulties. The infusion of psychological education (See Skouholt, 1977, Smith & Troth, 1975) into the curricula will foster the growth of rewarding, positive Interpersonal Relationships.

Involvement in secondary interventions which are not linked specifically to individual career development needs is labeled "prevention." Behaviors, Self-Talk, Thoughts, and Emotions can be shaped toward mature and realistic career choices through prevention. Psychological education, social skills training, and behavioral counseling interventions may be included in the prevention program. Preventive secondary exercises may be conducted with individuals--prompted by written or audiovisual media--small homogeneous groups, or entire classrooms. Assertion training and

personal development courses represent large-group, preventive secondary strategies.

## EVALUATION OF THE MODEL

Evaluation of the outcomes of Multimodal Career Education is an on-going process due to the data-gathering associated with continuous assessment. Individual needs and program demands should be closely monitored to insure that the objectives of career education are realized. Since assessment and intervention are intrinsically linked, the goals of career development activities are specified in concrete terms at the outset. Similarly, targets for interventions are defined as frequencies, excesses or deficits; therefore, the directions of changes provide obvious measures of outcomes. More precise outcomes can be determined by subjecting changes in the rates of target behaviors to non-parametric statistical analyses (See Marascuillo and McSweeny, 1977). Pre- and post-tests using standardized instruments or specially constructed scales may be used to broaden the evaluation. Data for as many factors as possible should be secured for a comprehensive evaluation of the model. Indirect measures such as numbers of students placed in academic or occupational programs, grade point averages, and proportions of graduates who secure jobs in desired career areas will contribute additionally to the evaluation process.

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